Application No.: 10/582,468
Filing Date: March 23, 2007

## AMENDMENTS TO THE CLAIMS

Please replace all prior versions of the claims with the following listing of the claims. Please note that in the amendments to the claims, deletions are indicated by strikethrough (e.g. deletion) or double <u>brackets</u> (e.g. [[word]]) and additions to the claims are underlined (e.g. addition).

- 1. (**Currently Amended**) A dental component for extending at least partially in a hole formed in jaw bone and through soft tissue belonging to the jaw bone, the dental component comprising one or more titanium dioxide layers applied on at least one outer surface of the dental component, wherein between about 70-100% of each layer comprises crystalline titanium dioxide in the anatase phase in a proportion of 70-100%.
  - 2. (Canceled)
- 3. (**Previously Presented**) The dental component as in claim 1, wherein each layer has a thickness of between about 0.05  $10 \, \mu m$ .
- 4. (**Currently Amended**) The dental component as in claim 1, wherein a majority of the outer surfaces of the dental component are provided with [[the]] crystalline titanium dioxide largely assuming in the anatase phase.
- 5. (**Currently Amended**) The dental component as in claim 1, wherein one or more a plurality of the outer surfaces of the dental component are provided with [[the]] crystalline titanium dioxide largely assuming in the anatase phase.
- 6. (**Previously Presented**) The dental component as in claim 1, wherein the dental component comprises a portion which can be placed against the soft tissue.
- 7. (**Previously Presented**) The dental component as in claim 1, wherein each titanium dioxide layer in the crystalline anatase phase comprises a bone stimulation substance.
- 8. (**Currently Amended**) The dental component as in claim 1, wherein an outer thread located on the dental component is provided with <u>a</u> outer layer[[s of]] <u>comprising</u> crystalline titanium dioxide <del>largely assuming</del> in the anatase phase.
- 9. (**Previously Presented**) The dental component as in claim 1, wherein a portion of the dental component configured to be placed against the soft tissue comprises a threadless outer surface.

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10. (Currently Amended) The dental component as in claim 1, wherein a portion of the dental component configured to extend through the soft tissue is coated with a layer[[s]] of crystalline titanium dioxide in the anatase phase, along and [[the]] a remaining length or surface of said portion of the dental component comprises constituting a part directed away from the implant dental component and is coated with a layer of crystalline titanium dioxide in the can be substantially amorphous, rutile, or in the anatase phase, and the length section with anatase can interact with the soft tissue in the connective tissue area.

11. (Withdrawn) A method for producing a dental component, comprising:

applying to outer layers of the dental component a liquid or electrolyte under voltage, and

choosing the voltage and the dwell time of the dental component in the liquid or electrolyte such that titanium dioxide, largely assumes the crystalline anatase phase.

- 12. (**Withdrawn**) The method as in claim 11, wherien characterized in that, for a given or predetermined first concentration of electrolyte, the voltage is chosen with a first value in the range of 100-270 volts, and in that, at a second concentration or composition of electrolyte, the voltage is chosen with a second value.
- 13. (**Withdrawn**) The method as claimed in patent claim 11 or 12, characterized in that the crystalline titanium dioxide is supplemented with a growth-stimulating substance, e. g. BMP, and/or measures.
- 14. (**Currently Amended**) The dental component of claim 1, wherein each layer comprises [[of]] crystalline titanium dioxide which completely assumes the anatase phase.
- 15. (**Currently Amended**) The dental component as in claim 10, wherein the portion of the dental component configured to extend through the soft tissue is coated with layers of crystalline titanium dioxide in the anatase phase along 2/3 of its length.
- 16. (**Currently Amended**) The dental component as in claim 1, <u>further comprising</u> wherein the a bone stimulation substance <u>disposed</u> on the dental component <u>comprises BMP</u>.
- 17. (**Withdrawn—Currently Amended**) The method as in claim 11, wherein the liquid comprises emprising sulfuric acid or phosphoric acid.
- 18. (New) The dental component as in claim 16, wherein the bone stimulation substance comprises BMP.